

# Subject Index to Volume 30

## A

- A6 cells, apical membrane, potassium channel activity, cAMP effects, F1055
- Acetazolamide, intrarenal pressure, glomerular filtration rate and, F169
- Acid-base balance  
chloride depletion alkalosis, angiotensin II role in, F741  
secretory currents, localization of, epithelial cells (turtle), F963
- Acidification  
cytosolic, calcium influx and, LLC-PK<sub>1</sub> cells, F617  
juxtamedullary proximal convoluted tubule, prenatal glucocorticoid stimulation, F746  
proton secretory rate, distal tubules, F753  
urinary  
acute unilateral ureteral obstruction, F365  
localization, epithelial cells (turtle), F963
- Acidosis  
metabolic, surface ion composition of bone and, F76  
pH regulation of ammoniogenesis, LLC-PK<sub>1</sub> cells, F481  
respiratory, surface ion composition of bone and, F76
- Adenosine, intrarenal oxygenation effects, F787
- Adenosine monophosphate, cyclic  
adhesion loss and, mesangial cells, F336  
AVP response mediated by, collecting duct water permeability and, F554  
AVP-sensitive, lithium-induced nephrogenic diabetes, F505  
growth hormone suppression, phosphaturic response to PTH and, F1110  
intramembranous particles and, nephrogenic diabetes insipidus, F640  
phosphodiesterase isozymes, pathogenesis of nephrogenic diabetes insipidus and, F345  
potassium channel activity and, apical membrane of A6 cells, F1055  
protein kinase C activity and, renal LLC-PK<sub>1</sub> cells, F945  
protein kinase C modulation of, proximal tubular cells, F587
- Adenosine triphosphatase, vacuolar hydrogen-activated, acute unilateral ureteral obstruction, F365
- Adenosine triphosphate  
depletion, tight-junction integrity of LLC-PK<sub>1</sub> cells, F1038  
intracellular, sodium transport relations, proximal convoluted tubules, F634  
PAH uptake and, renal tubules (snake), F858
- Adenosine triphosphate antagonist, regulation, sodium-hydrogen exchange, renal epithelial cells, F607
- Adenylate cyclase  
AVP-sensitive, lithium-induced nephrogenic diabetes, F505
- clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126
- dopamine receptors, renal cortical collecting duct, F890
- protein kinase C activity and, renal LLC-PK<sub>1</sub> cells, F945
- Adenylyl cyclase, prazosin-sensitive adrenoceptors and, ICMD cells, F760
- ADH: *see* Antidiuretic hormone
- Adrenal glomerulosa cells, calcium channels, aldosterone secretion and, F706
- Aequorin  
fluoride effects on cell calcium, proximal tubules, F318  
sodium-calcium exchange and calcium depletion, proximal tubules, F328
- Aging  
cell phosphate changes, NMR-visible kidney, F153  
intestinal calcium-binding proteins, dietary calcium and, F474
- Alanine, transport, specificity of, renal papilla, F495
- Aldosterone  
secretion  
calcium channels and, F706  
11-dehydrocorticosterone effects, bladder (toad), F873  
sodium channels and, cortical collecting tubules, F933
- Alkalinization, urinary, localization, epithelial cells (turtle), F963
- Alkalosis  
bicarbonate transport and, distal tubules, F308  
chloride depletion, regulatory role of angiotensin II in, F741  
metabolic, proton secretory rate during, distal tubules, F753  
pH regulation of ammoniogenesis, LLC-PK<sub>1</sub> cells, F481
- Amiloride  
cDNA cloning and immunolocalization, LLC-PK<sub>1</sub> renal epithelial cells, F1088  
interaction with PTH, calcium absorption in connecting tubules, F36  
low-dose, sodium-hydrogen exchange and, distal colon, F545  
phosphate transport and, kidney, transmembrane electrical potential effects, F663  
sodium channels sensitive to, cortical collecting tubules, F933
- Amino acids  
hyperfiltration induced by, dopamine blocker and renal denervation effects, F70  
transport, specificity of, renal papilla, F495
- p-Aminohippurate  
extraction, diseased kidney, F726  
transport, sodium dependence of, basolateral membrane vesicles (pig), F265  
uptake and secretion, PAH- $\alpha$ -KG effects, renal tubules (snake), F858
- p-Aminohippurate- $\alpha$ -ketoglutarate, countertransport, PAH uptake and, renal tubules (snake), F858
- Ammoniogenesis, pH regulation of, LLC-PK<sub>1</sub> cells, F481
- Analbuminemia, nephrectomy and, glomerular sclerosis in, F256
- ANF: *see* Atrial natriuretic factor
- Angiotensin  
cortical and papillary blood flow, laser-Doppler flowmetry, F998  
ion channel activities, mesangial cells, F808  
renin inhibition, renal response, awake state (marmoset), F179  
thromboxane and, genetic hypertension, F238  
vasoconstrictor effects, afferent arterioles, F273
- Angiotensin II  
blood flow response to, pregnancy, awake state, F51  
cAMP and, proximal tubular cells, F587  
glomerular hypertrophy, hypertension and, F459  
isoelectric peaks, renal effects, F975  
PAF and, renal vascular reactivity, F108  
receptors: *see* Receptors  
regulatory role of, chloride-depletion alkalosis, F741  
sodium-hydrogen exchanger and, proximal tubules in spontaneous hypertension, F526
- ANP: *see* Atrial natriuretic peptide
- Antidiuretic hormone: *see also* Vasopressin  
clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126  
water channels induced by polyclonal antibodies in, urinary bladder (frog), F437  
synthetic estrogen effects (frog), F144
- Antimycin, erythropoietin mRNA and, kidney, F982
- Arachidonic acid, complement C5b-9 complex effects, glomerular epithelial cells, F427
- Arginine, depletion, glomerular and tubular function studies, F779
- Arterioles  
afferent, vasoconstrictor effects of vasopressin and angiotensin, F273  
afferent and efferent, atriopeptin III effects, F1102
- Atherosclerosis, cholesterol esterase, renal microvascular, F163
- ATP: *see* Adenosine triphosphate
- Atrial natriuretic factor  
central effects of, renal salt excretion, F354  
receptor: *see* Receptors
- Atrial natriuretic peptide  
C-type, heart (shark), F734  
effects, afferent and efferent arterioles, F1102  
glomerular receptors, filtration and, renal sympathetic nerve modulation of, F29  
modulation, calcium channels and aldosterone secretion, F706  
renal, evolving concepts, F921
- Atriopeptin, renal, evolving concepts, F921
- Atriopeptin III, effects, afferent and efferent arterioles, F1102

## Autoregulation

- cortical and papillary blood flow, angiotensin and, F998
- renal hemodynamics, protein feeding effects, F815

## Awake state

- norepinephrine spillover, renal nerve activity and, F44
- pregnancy, blood flow response to angiotensin II, renal, F51
- renin inhibition (marmoset), F179

## B

- Barium, calcium-activated potassium channel, renal brush-border membrane vesicles, F187

## Betaine

- content, salt loading and, inner medulla, F957
- transporter, MDCK cells, F197

## Bicarbonate

- absorption, acidification, prenatal glucocorticoid stimulation, F746
- metabolic alkalosis, proton secretory rate during, distal tubules, F753
- transport, chronic alkalosis, distal tubules, F308

Bladder: *see also* Urinary bladderBlood flow: *see also* Microcirculation

- control, genetic and renovascular hypertension, F400
- medullary, cytochrome oxidation and, F849

## renal

- angiotensin II infusion effects, pregnancy, awake state, F51
- L-NAME effects, F1033
- PAF effects, F108
- protein feeding effects, F815
- stereospecific actions of 8,9-EET, F578

- renal cortical and papillary, angiotensin effects, laser-Doppler flowmetry, F998

Blood pressure: *see also* Pressure

- hypovolemic shock, nitric oxide effects, F868
- PAF effects, kidney, F108
- renal function and, L-NAME effects, F1033
- response, thromboxane and angiotensin, F238

- Bone, surface ion composition, metabolic acidosis effects, F76

- Brain, ANF effects, renal salt excretion, F354

## Brush-border membrane

## renal

- phosphorus transport, maleic acid effects, F227
- salt transport, thyroid hormone effects, F420
- sodium-citrate cotransporter in, chronic potassium depletion effects, F767

## Brush-border membrane vesicles

## renal

- calcium-activated potassium channel, F187
- dipeptide transport, F670
- organic cation transport in, F443
- phosphate transport, transmembrane electrical potential and, F663
- renal tubular, maturation of sodium-hydrogen exchange, F1017

## C

- Calbindin-D9K, abnormal intestinal regulation of, genetic hypertension, F474
- Calcitonin, functional receptors for, multinucleated alveolar macrophage expression of, F1026

## Calcium

- absorption, connecting tubules, antidiuretic diuretics and PTH in, F36
- activation, maxi potassium channels, kidney cells, F696
- cAMP and, proximal tubular cells, F587
- cell, endothelin-1 effects, collecting tubule cells, F720
- cytosolic, fluoride effects, proximal tubules, F318
- depletion, sodium-calcium exchange and, proximal tubules, F328
- dietary, intestinal calcium-binding proteins and, F474
- influx, cytosolic acidification and, LLC-PK<sub>1</sub> cells, F617
- potassium channel activated by, renal brush-border membrane vesicles, F187

- Calcium channels, aldosterone secretion and, modulation by potassium and ANP, F706

## Calcium ions

- active transport, cortical collecting duct, F799
- intracellular, glomerular mesangium, F466

- Calcium oxalate monohydrate crystals, nucleation of, nephrocalcin and urine effects, F824

- Calmodulin, abnormal intestinal regulation of, genetic hypertension, F474

- Calmodulin antagonist, regulation, sodium-hydrogen exchange, renal epithelial cells, F607

- cAMP: *see* Adenosine monophosphate, cyclic

## Captopril

- blood flow response to, pregnancy, awake state, F51
- cytochrome oxidation, changes in outer medulla, F849

- Cations, organic, transport, renal brush-border membrane vesicles, F443

- Cation channel, activities, mesangial cells, F808

- Cell volume, isotonic control, cytoskeleton role in, proximal tubules, F60

- Central nervous system, ANF effects, renal salt excretion, F354

- Charybdotoxin, calcium-activated potassium channel, renal brush-border membrane vesicles, F187

## Chloride

- conductance, intercalated cells, cortical collecting duct, F377
- depletion, alkalosis, angiotensin II and, F741
- transport, chronic alkalosis, distal tubules, F308

- Chloride-bicarbonate exchange, thiazide effects, colon, F452

- Chloride-bicarbonate ion exchange,  $\alpha$ - and  $\beta$ -intercalated cells, cortical collecting duct, F377

- Cholesterol, plasma, nephrectomized albuminemic rats, F256

- Cholesterol esterase, preglomerular microvessels, F163

- Cilostamide, intramembranous particles and, nephrogenic diabetes insipidus, F640

- Clonidine, prostaglandin E<sub>2</sub> and, sodium and water transport, cortical collecting duct, F126

- Coenzyme A, renal ischemia-reperfusion injury, glycine effects, F841

- Collagen, synthesis, thromboxane effects, F488

## Colon

- distal, sodium-hydrogen exchange, glucocorticoid effects, F545
- sodium chloride absorption, thiazide effects, F452

- Complement C5b-9 complex, arachidonic release and, glomerular epithelial cells, F427

- Corticomedullary junction, ischemia-reperfusion injury, hypothermic, glycine effects, F841

- Cyanide, erythropoietin mRNA and, kidney, F982

## Cyclooxygenase

- production, bilateral ureteral obstruction and, F248
- stereospecific actions, kidney, F578

- Cytochalasin B, isotonic cell volume control, proximal tubules, F60

- Cytochrome, oxidation, changes in outer medulla, F849

- Cytokine-like genes, expression, during renal ischemia, F1095

## Cytokines

- nerve growth factor synthesis and, mesangial cells, F792
- phagocyte adhesion induced by, mesangial cells, F1071

## D

- 11-Dehydrocorticosterone, aldosterone secretion and, urinary bladder (toad), F873

- Deoxycorticosterone, clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126

- Deoxyribonucleic acid, recombinant, C-type ANP, heart (shark), F734

- Development: *see also* Growth; Maturation cell phosphate changes, NMR-visible kidney, F153

- growth hormone suppression, phosphaturic response to PTH and, F1110
- renal, glucocorticoids stimulated acidification, prenatal, F746

- Dexamethasone, low-dose, sodium-hydrogen exchange and, distal colon, F545

- Dextran, clearance, PAF and glomerular size-selective properties, F85

- Diabetes insipidus
- nephrogenic

- intramembranous particles in, F640
- lithium-induced, cellular mechanism of, F505
- pathogenesis of, F345

- Diacylglycerol, mass, high glucose effects, mesangial cells, F571

- 3,3'-Diallyldiethylstilbestrol, ADH-induced water channels and (frog), F144

- 1,25-Dihydroxyvitamin D<sub>3</sub>: *see* Vitamin D<sub>3</sub>

- Dipeptide, transport, multiple carriers for, F670

- Diuresis, prorenin and, renal effects, F975

## Diuretics

- anticalciuric, PTH and, calcium absorption in connecting tubules, F36
- chronic infusion, distal convoluted tubules, F137
- loop, protein feeding and, renal hemodynamics, F815

## Dopamine

- blockers, renal denervation and, amino acid-induced hyperfiltration, F70
- PAF and, renal vascular reactivity, F108
- PGE<sub>2</sub> production and, ICMD cells, F647, F655
- sodium-hydrogen exchanger and, proximal tubules in spontaneous hypertension, F526
- Dopamine agonists, renal cortical collecting duct, F890
- Duodenum, calcium-binding proteins, dietary calcium and, F474

## E

- 8,9-EET: *see* 8,9-Epoxyeicosatrienoic acid
  - EGF: *see* Epidermal growth factor
  - Eicosanoids
    - PAF and, renal vascular reactivity, F108
    - production
      - bilateral ureteral obstruction and, F248
      - experimental glomerulonephritis, F213
  - Enalapril, angiotensin II, chloride depletion alkalosis, F741
  - Endocytosis
    - receptor-mediated, EGF clearance, kidney, F988
    - vasopressin receptor-mediated, F1
  - Endothelial cells, glomerular capillary, endothelin-1 expression, F117
  - Endothelin, synthesis, renal tubule cells, F221
  - Endothelin-1
    - AVP-stimulated osmotic water permeability and, inner medullary collecting duct, F951
    - cell calcium and, collecting tubule cells, F720
    - regulated expression of, glomerular capillary endothelial cells, F117
  - Endothelium-derived relaxing factor
    - arginine depletion, glomerular and tubular function studies, F779
  - blood pressure, renal function and, L-NAME and, F1033
  - hypovolemic shock, blood pressure and renal function, F868
  - inhibition, glomerular microcirculation and, F360
  - nitric acid production, glomerular mesangial cells, F600
- Epidermal growth factor, clearance, kidney, F988
  - Epithelial cells, localization, acid-base secretory currents (turtle), F963
  - 8,9-Epoxyeicosatrienoic acid, synthesis, glomerular stereospecific, kidney, F578
  - Erythropoietin, mRNA, inhibitors of oxidative phosphorylation and, kidney, F982
  - Estrogen, synthetic, ADH-induced water channels and (frog), F144
  - Ethacrynic acid, renal hemodynamics, protein feeding effects, F815

## F

- Fanconi syndrome, response to protein and, renal, F14
- Feedback
  - tubuloglomerular
    - acetazolamide effects, F169
    - bifurcation analysis, single-nephron glomerular filtration rate, F904
    - closed-loop analysis, F880
    - genetic and renovascular hypertension, F400
    - protein feeding effects, F815
    - protein feeding in Fanconi syndrome, F14
- Feeding
  - diet, cell phosphate changes in NMR-visible kidney, F153
  - dietary phosphorus, maleic acid and renal transport, F227
  - low-phosphate diet, thyroid hormone and, renal brush-border membrane, F420
  - protein
    - regulation of renal hemodynamics after, F815
    - renal response in Fanconi syndrome, F14
- Fetus: *see also* Pregnancy
  - laminin, mesangial cell interaction with, F688
- Fibroblasts
  - renal
    - cell-specific markers in, F283
    - papillary, paracrine stimulation by PDGF, F292
- Fibronectin, synthesis, thromboxane effects, F488
- Fibrosis, interstitial, papillary fibroblasts, F292
- Filtration
  - glomerular
    - after acetazolamide, F169
    - diseased kidney, PAH extraction, F726
    - EGF clearance, F988
    - genetic and renovascular hypertension, F400
    - L-NAME effects, F1033
    - protein feeding and, F815
    - pulsatile pressure and flows in, F409
    - renal sympathetic nerve modulation of, F29
    - stereospecific actions of 8,9-EET, F578
    - single-nephron glomerular rate, bifurcation analysis of tubuloglomerular feedback, F904
- Flowmetry, laser-Doppler, cortical and papillary blood flow, angiotensin effects, F998
- Fluid, balance, body, ANP and atriopeptin, F921
- Fluoride, cell calcium and, proximal tubules, F318
- Fluorometry, sodium-calcium exchange, glomerular mesangium, F466
- Fura-2
  - fluoride effects on cell calcium, proximal tubules, F318
  - sodium-calcium exchange, glomerular mesangium, F466
- Furosemide
  - cytochrome oxidation, changes in outer medulla, F849
  - renal hemodynamics, protein feeding effects, F815

- sodium and water transport, ascending vasa recta, F519

## G

- Glomerulonephritis
  - experimental, leukocyte role in, F213
  - immune-mediated, nerve growth factor synthesis and, IL-1 $\beta$  and TNF- $\alpha$  stimulation of, F792
- Glomerulosclerosis, thromboxane effects, extracellular matrix proteins, F488
- Glucocorticoids
  - low-dose, sodium-hydrogen exchange and, distal colon, F545
  - metabolism, aldosterone and, bladder (toad), F873
  - prenatal, juxtamedullary proximal convoluted tubule acidification, F746
- Glucose, effects on diacylglycerol and protein kinase C, mesangial cell cultures, F571
- Glucose transporter, ADH-induced water channels and (frog), F144
- Glutamate, transport, specificity of, renal papilla, F495
- Glutathione, glycine effects, renal ischemia-reperfusion injury, F841
- Glycerophosphorylcholine, content, salt loading and, inner medulla, F957
- Glycine
  - protective effects, hypothermic renal ischemia-reperfusion injury, F841
  - transport, specificity of, renal papilla, F495
- Glycyl-L-proline, carrier-mediated transport, renal brush-border membrane vesicles, F670
- G protein,  $\alpha$ -subunits, localization in kidney, F831
- Growth: *see also* Development; Maturation
  - renal fibroblasts, cell-specific markers in, F283
- Growth hormone, suppression, phosphaturic response to PTH and, F1110
- Guanosine monophosphate, cyclic
  - AVP-sensitive, lithium-induced nephrogenic diabetes, F505
  - glomerular ANP receptors and filtration, renal sympathetic nerve modulation of, F29
  - nitric acid production, glomerular mesangial cells, F600
  - phosphodiesterase isozymes, pathogenesis of nephrogenic diabetes insipidus and, F345
- Guanosine triphosphate, cyclic, binding proteins, localization in collecting duct cells, F1063

## H

- Heart, C-type natriuretic peptide in (shark), F734
- Henle's loop
  - ascending thin limb of, protamine effects on ion conductance (hamster), F593
  - microinfusion, amino acids, F495
- Heparin, ion conductance and, ascending thin limb of Henle's loop (hamster), F593
- Hopf bifurcation, TGR-mediated oscillations, single-nephron glomerular filtration rate, F904
- Hormonal responses, sodium-hydrogen exchanger, proximal, in spontaneous hypertension, F526



- Hydrogen-ATPase, cellular distribution, acute unilateral ureteral obstruction, F365
- 11 $\beta$ -Hydroxysteroid dehydrogenase, aldosterone secretion and, urinary bladder (toad), F873
- Hyperfiltration, amino acid-induced, dopamine blocker and renal denervation effects, F70
- Hypertension  
blood pressure, renal function and, L-NAME and, F1033  
endothelin-1 release, glomerular capillary endothelial cells, F117  
genetic  
blood flow control in, F400  
dietary calcium, regulation of calbindin-D9K, F474  
thromboxane and angiotensin effects, F238  
glomerular, nephrectomized analbuminemic rats, F256  
glomerular hypertrophy and, F459  
renovascular, blood flow control in, F400  
spontaneous  
exaggerated natriuresis in, renal volume expansion and, F567  
sodium-hydrogen exchanger in proximal tubules, F526
- Hypertrophy, chronic thiazide infusion and, distal convoluted tubules, F137
- Hypotension, hemorrhagic, blood pressure and renal function during, nitric oxide effects, F868
- Hypoxia, erythropoietin mRNA and, kidney, F982

## I

- ICMD cells: see Kidney cells, inner medullary collecting duct
- IGF: see Insulin-like growth factor
- IgG complex, uptake, PGE<sub>2</sub> and thromboxane A<sub>2</sub> effects, mesangial cells, F536
- IL-1 $\beta$ : see Interleukin-1 $\beta$
- IMCD: see Kidney medulla, inner collecting duct
- Immunoblotting, *ral* localization, collecting duct cells, F1063
- Immunohistochemistry, IGF-I and IGF-binding protein, kidney, F22
- myo-Inositol  
content, salt loading and, inner medulla, F957  
transporter, MDCK cells, F197
- Insulin-like growth factor, binding protein from, kidney, F22
- Insulin-like growth factor I, growth and, reduced renal mass, F626
- Integrins, phagocyte adhesion induced by, mesangial cells, F1071
- $\gamma$ -Interferon, nitric acid production, glomerular mesangial cells, F600
- Interleukin-1  
inhibition of sodium-potassium-ATPase, inner medullary collecting duct cells, F1013  
phagocyte adhesion induced by, mesangial cells, F1071
- Interleukin-1 $\beta$ , nerve growth factor synthesis and, mesangial cells, F792
- Ions, surface composition, bone, metabolic acidosis effects, F76
- Ischemia, renal, cytokine-like gene expression during, F1095

- Isoproterenol,  $\beta$ -adrenoceptors, proximal straight tubules, F393

## J

- Juxtaglomerular apparatus, afferent arterioles, vasoconstrictor response of, F273

## K

- Kallikrein, cortical and papillary blood flow, laser-Doppler flowmetry, F998
- Kidney  
ablation, nephrectomized analbuminemic rats, F256  
arterioles, vasoconstrictor effects of vasopressin and angiotensin, F273  
brush-border membrane, sodium-citrate cotransporter in, chronic potassium depletion effects, F767  
collecting duct  
postnatal maturation, F91  
water permeability regulation, F554  
cortical collecting duct, clonidine and PGE<sub>2</sub> effects on sodium and water transport, F126  
denervation, effects on amino acid-induced hyperfiltration, F70  
diseased, PAF extraction from, F726  
epidermal growth factor clearance, kinetic analysis, F988  
8,9-epoxyeicosatrienoic acid synthesis, glomerular stereospecific, F578  
fibroblasts  
cell-specific markers in, F283  
papillary, paracrine stimulation by PDGF, F292  
function  
blood pressure and, L-NAME effects, F1033  
hypovolemic shock, nitric oxide effects, F868  
prorenin effects, F975  
sodium balance and, F300  
glomerular barrier size selectivity in macromolecules, platelet-activating factor alteration of, F85  
glomerular capillary endothelial cells, endothelin-1 expression, F117  
G protein  $\alpha$ -subunits, heterogenous localization, F831  
hemodynamics, regulation after protein feeding, F815  
inner medullary collecting duct, PGE<sub>2</sub> production, dopamine effects, F647, F655  
insulin-like growth factor binding protein in, F22  
interstitial volume expansion, exaggerated natriuresis, spontaneous hypertension, F567  
ischemia-reperfusion injury, hypothermic, glycine effects, F841  
ischemic failure, cytokine-like gene expression during, F1095  
luminal side, nonsaturable uptake of EGF from, F988  
norepinephrine spillover, renal nerve activity and, awake state, F44  
phosphate transport, transmembrane electrical potentials and, F663  
phosphorus transport, maleic acid effects, F227  
poly(A)<sup>+</sup> RNA, oocyte injection with, sodium-calcium exchange activity, F207

- protein kinase C, characterization of, F679
- pulsatile pressure and flow, glomerular filtration, F409
- reduced mass, growth, IGF-I effects, F626
- responses, renin inhibition, awake state (marmoset), F179
- response to protein, Fanconi syndrome, F14
- salt excretion, ANF effects, central, F354
- tubuloglomerular feedback, closed-loop analysis, F880
- vascular reactivity, PAF and, F108
- Kidney cells  
apical membrane, potassium channel activity, cAMP effects, F1055  
collecting duct, localization of *ral* in, F1063  
collecting tubule, calcium, endothelin-1 effects, F720  
cortical collecting tubules, apical maxi potassium channels, F696  
epithelial, sodium-hydrogen exchange, ATP and calmodulin antagonist effects, F607  
glomerular epithelial, complement C5b-9 complex effects, arachidonic acid release, F427  
inner medullary collecting duct  
IL-1 inhibition of sodium-potassium-ATPase, F1013  
prazosin-sensitive adrenoceptors, F760  
proximal tubular, protein kinase C modulation of cAMP, F587  
tubular, endothelin synthesis, F221
- Kidney cortex  
angiotensin II receptors in (rat, monkey), F512  
blood flow: see Blood flow  
collecting duct  
active calcium ion transport in, F799  
 $\alpha$ - and  $\beta$ -intercalated cell types in, F377  
dopamine receptors in, F890  
ischemia-reperfusion injury, hypothermic, glycine effects, F841
- Kidney glomerulus  
ANF receptor mRNA, localization, F1080  
eicosanoid production by, bilateral ureteral obstruction, F248  
filtration rate, acute nitric oxide inhibition and, F360  
function, arginine depletion effects, F779  
hypertrophy, hypertensive injury and, F459  
mesangium, nerve growth factor synthesis, IL-1 $\beta$  and TNF- $\alpha$  stimulation of, F792  
microcirculation: see Microcirculation  
sclerosis, nephrectomized analbuminemic rats, F256  
sodium-calcium exchange regulation in, F466
- Kidney medulla  
collecting duct, fibroblasts, PDGF and paracrine stimulation, F292  
hypoxia, adenosine effects, F787  
inner, osmotically regulated taurine content, F957  
inner collecting duct  
AVP stimulation of osmotic water permeability, endothelin-1 effects, F951  
PGE<sub>2</sub> production, dopamine effects, F647, F655

- outer, outer and inner stripes, cytochrome oxidation in, F849  
thin ascending limb of Henle, protamine effects on ion conductance (hamster), F593
- Kidney papilla**  
amino acid transport, specificity of, F495  
blood flow: *see* Blood flow  
fibroblasts, paracrine stimulation by PDGF, F292
- Kidney stone, urine and nephrocalcin effects on nucleation, F824**
- Kidney tubules**  
basolateral transport, tetraethylammonium, F386  
brush-border membrane, developmental maturation of sodium-hydrogen exchange, F1017  
collecting cells, calcium, endothelin-1 effects, F720  
connecting, calcium absorption, antidiuretic diuretics and PTH role in, F36  
cortical collecting, amiloride-sensitive sodium channels, F933  
cortical collecting cells, apical maxi potassium channels, F696  
distal  
chronic alkalosis, bicarbonate transport in, F308  
proton secretory rate during metabolic alkalosis, F753  
distal convoluted, chronic thiazide infusion effects, F137  
endothelin synthesis, cells, F221  
function, arginine depletion effects, F779  
juxtamedullary proximal convoluted, acidification, prenatal glucocorticoid stimulation, F746  
**PAH uptake and secretion, PAH- $\alpha$ -KG countertransport effects (snake), F858**  
proximal  
calcium-activated potassium channel, F187  
coupled water transport, F1046  
fluoride effects on cell calcium, F318  
isotonic cell volume control, cytoskeleton role in, F60  
response to protein feeding, Fanconi syndrome, F14  
sodium-calcium exchange and calcium depletion in, F328  
sodium-hydrogen exchanger in spontaneous hypertension, F526  
urate and PAH transport, sodium dependency of (pig), F265  
proximal convoluted, sodium transport and intracellular ATP, F634  
proximal straight, functional  $\beta$ -adrenoceptors in, F393  
tubuloglomerular feedback, closed-loop analysis, F880

## L

- Laminin**  
mesangial cell interaction with, adult and fetal, F688  
synthesis, thromboxane effects, F488  
LDL: *see* Lipoproteins, low-density  
Leukocytes, metabolic and functional derangements and, glomerulonephritis, F213  
Leukotriene B<sub>4</sub>, production, experimental glomerulonephritis, F213

- Lipopolysaccharide, *Escherichia coli*, glomerular mesangial cells, F600  
Lipoproteins, low-density, uptake, mesangial cells, F536  
Lithium, nephrogenic diabetes induced by, cellular mechanism of, F505  
LLC-PK<sub>1</sub> cells  
ammoniogenesis in, pH regulation of, F481  
cDNA cloning and immunolocalization, sodium-hydrogen exchanger, F1088  
cytosolic acidification in, calcium influx, F617  
protein kinase C activity, cAMP effects, F945  
tight junction integrity of, ATP depletion effects, F1038

## M

- Macromolecules, glomerular barrier size selectivity in, platelet-activating factor alteration of, F85  
Macrophages, alveolar, multinucleated, receptors for calcitonin and, F1026  
Maleic acid, phosphorus transport and, kidney, F227  
Maturation: *see also* Development; Growth postnatal, renal collecting duct, F91  
sodium-hydrogen exchange, renal tubular brush-border membrane, F1017  
MDCK cells, Myo-inositol and betaine transporters, regulated by tonicity, F197  
Meclofenamate, blood flow response to, pregnancy, awake state, F51  
**Membrane**  
basement, laminin, mesangial cell interaction, adult and fetal, F688  
basolateral, urate and PAH transport, sodium dependency of (pig), F265  
luminal, organic cation transport, F443  
**Mesangial cells**  
adhesion and shape, thrombin effects, F336  
adult and fetal, specific laminin domains, F688  
glomerular, nitric acid actions on, F600  
high glucose effects, diacylglycerol and protein kinase C, F571  
IgG complex and LDL uptake, PGE<sub>2</sub> and thromboxane A<sub>2</sub> effects, F536  
ion channel activities of, F808  
nerve growth factor, IL-1 $\beta$  and TNF- $\alpha$  stimulation of, F792  
phagocyte adhesion, cytokine-induced, F1071  
sodium-calcium exchange regulation in, F466  
Methylisobutyl amiloride, calcium-activated potassium channel, renal brush-border membrane vesicles, F187  
N<sup>1</sup>-Methylnicotinamide, transport, renal brush-border membrane vesicles, F443  
Microcirculation: *see also* Blood flow glomerular, acute nitric oxide inhibition and, F360  
Microcolorimeter, photon-counting, F203  
Microelectrode, intracellular, proximal straight tubules, F393  
**Microscopy**  
electron, postnatal maturation of collecting duct, neonate, F91

- fluorescent, vasopressin receptor-mediated endocytosis, F1  
Microvessels, preglomerular, cholesterol esterase in, F163  
**Models**  
closed-loop analysis, tubuloglomerular feedback, F880  
single-nephron glomerular rate, bifurcation analysis of tubuloglomerular feedback, F904  
Monoclonal antibodies, cell-specific markers, renal fibroblasts, F283  
**Muscle cells**  
smooth, thrombin effects on adhesion loss, F336  
vascular smooth, vasopressin-induced increase in intracellular sodium, F1007

## N

- Natriuresis**  
ANP and atriopeptin, evolving concepts, F921  
exaggerated, renal volume expansion and, hypertension, F567  
pressure, L-NAME effects, F1033  
prorenin and, renal effects, F975  
**Neonate**  
collecting duct, postnatal maturation, F91  
maturation of sodium-hydrogen exchange, renal tubular brush-border membrane, F1017  
surface ion composition of bone, metabolic acidosis effects, F76  
**Nephrectomy**  
analbuminemia and, glomerular sclerosis in, F256  
reduced renal mass, IGF-I effects, F626  
Nephritis, nephrotoxic, leukocyte role in, F213  
Nephrocalcin, urine and, nucleation of calcium oxalate monohydrate crystals, F824  
**Nephron, ANF receptor mRNA, localization, F1080**  
Nerve growth factor, synthesis, IL-1 $\beta$  and TNF- $\alpha$  stimulation of, mesangial cells, F792  
Nimodipine, PAF and, renal vascular reactivity, F108  
**Nitric oxide**  
inhibition  
blood pressure and renal function, during shock, F868  
glomerular microcirculation and, F360  
synthesis and action, glomerular mesangial cells, F600  
N<sup>G</sup>-Nitro-L-arginine methyl ester, renal function, blood pressure and, F1033  
L-NAME: *see* N<sup>G</sup>-Nitro-L-arginine methyl ester  
Nitrogen, balance, IGF-I and, renal mass, F626  
Nitroprusside, renal nerve activity, norepinephrine spillover and, awake state, F44  
**Norepinephrine**  
cAMP and, proximal tubular cells, F587  
PAF and, renal vascular reactivity, F108  
spillover, renal nerve activity and, F44  
Nuclear magnetic resonance, kidney visible on, changes in cell phosphate with age and diet, F153

## O

- Oligomycin, erythropoietin mRNA and, kidney, F982  
 Oligonucleotide primers, C-type ANP, heart (shark), F734  
 Oocytes, sodium-calcium exchange, renal, F207  
 Osmolytes  
   *myo*-inositol and betaine transporters, regulated by tonicity, F197  
   taurine content, inner medulla, F957  
 Ouabain, volume control resistant to, proximal tubules, F60  
 Oxidative phosphorylation, inhibitors of, erythropoietin mRNA and, kidney, F982  
 2-Oxoglutarate, PAH and urate transport with, basolateral (pig), F265  
 Oxygen  
   cortical partial tension, adenosine effects, F787  
   tension, changes in outer medulla, F849  
 Oxygenation, intrarenal, adenosine effects, F787

## P

- PAF: *see* Platelet-activating factor  
 PAH: *see* *p*-Aminohippurate  
 PAH- $\alpha$ -KG: *see* *p*-Aminohippurate- $\alpha$ -ketoglutarate  
 Parathyroid hormone  
   anticalciuric diuretics and, calcium absorption in connecting tubules, F36  
   calcium transport and, cortical collecting duct, F799  
   cAMP and, proximal tubular cells, F587  
   phosphaturic response to, growth hormone suppression effects, F1110  
   sodium-hydrogen exchanger and, proximal tubules in spontaneous hypertension, F526  
 PDGF: *see* Platelet-derived growth factor  
 Peptides  
   calcitonin gene-related, multinucleated alveolar macrophage expression of, F1026  
   transport, renal brush-border membrane vesicles, F670  
 Permeability  
   paracellular, ATP depletion and, LLC-PK<sub>1</sub> cells, F1038  
   urea, AVP stimulation, endothelin-1 effects, IMCD, F951  
   water  
     collecting duct, regulation of, F554  
     hydraulic, nephrogenic diabetes insipidus, F640  
 PGE<sub>2</sub>: *see* Prostaglandin E<sub>2</sub>  
 pH  
   intracellular  
     calcium influx effects, LLC-PK<sub>1</sub> cells, F617  
     cDNA cloning, LLC-PK<sub>1</sub> cells, F1088  
   intracellular ATP, sodium transport, and proximal convoluted tubules, F634  
   regulation, ammoniogenesis, LLC-PK<sub>1</sub> cells, F481  
 Phagocytes, adhesion, cytokine-induced, mesangial cells, F1071  
 Phenylephrine, renal nerve activity, nor-epinephrine spillover and, awake state, F44

- Phorbol esters  
   protein kinase C measured as, renal, F679  
   sodium-hydrogen exchanger and, proximal tubules in spontaneous hypertension, F526  
 Phosphate  
   intracellular transport, aging and diet effects, NMR-visible kidney, F153  
   reabsorption, renal, PTH response to, F1110  
   transport, kidney, transmembrane electrical potential effects, F663  
 Phosphaturia, maleic acid and, F227  
 Phospholipase A<sub>2</sub>  
   complement C5b-9 complex effects, glomerular epithelial cells, F427  
   production, bilateral ureteral obstruction and, F248  
 Phosphonoformic acid, thyroid hormone and, renal brush-border membrane, F420  
 Phosphorus, transport, maleic acid effects, kidney, F227  
 Plasma, flow, renal, PAH extraction and, F726  
 Plasma renin-angiotensin system, ANF effects, renal salt excretion, F354  
 Platelet-activating factor  
   glomerular barrier size selectivity and, macromolecules, F85  
   vascular reactivity and, renal, F108  
 Platelet-derived growth factor, paracrine stimulation by, papillary fibroblasts, F292  
 Polyclonal antibodies, ADH-induced water channels, urinary bladder (frog), F437  
 Polymerase chain reaction  
   C-type ANP, heart (shark), F734  
   reverse transcription, ANF receptor mRNA, kidney, F1080  
 Polypeptides, two-dimensional patterns, renal fibroblasts, F283  
 Potassium  
   conductance, intracellular ATP and, proximal convoluted tubules, F634  
   depletion, chronic, stimulation of sodium-citrate cotransporter, brush-border membrane, F767  
   modulation, calcium channels and aldosterone secretion, F706  
 Potassium channels  
   activity, cAMP effects, apical membrane of A6 cells, F1055  
   apical maxi, intercalated cells of cortical collecting tubule, F696  
   calcium-activated, renal brush-border membrane vesicles, F187  
 Potentials, transmembrane electrical, phosphate transport and, kidney, F663  
 Prazosin, adrenoceptors sensitive to, inner medullary collecting duct cells, F760  
 Pregnancy: *see also* Fetus  
   blood flow response, angiotensin II infusion, awake state, F51  
 Pressure: *see also* Blood pressure  
   interstitial hydrostatic, renal, spontaneous hypertension, F567  
   intrarenal, after acetazolamide, F169  
   pulsatile flow and, glomerular filtration, F409  
 Probenecid, PAH and urate transport with, basolateral (pig), F265

- Prorenin, nonactivated isoelectric peaks, differing renal effects, F975  
 Prostacyclin, cholesterol esterase, renal microvascular, F163  
 Prostaglandins  
   blood flow response to, pregnancy, awake state, F51  
   cortical and papillary blood flow, laser-Doppler flowmetry, F998  
   renal vascular response to, F238  
 Prostaglandin E<sub>2</sub>  
   clonidine and, sodium and water transport, cortical collecting duct, F126  
   inhibition of sodium-potassium-ATPase, inner medullary collecting duct cells, F1013  
   production, ICMD cells, dopamine effects, F647, F655  
 Prostaglandin E<sub>2</sub> analogue, IgG complex and LDL uptake, mesangial cells, F536  
 Protamine, ion conductance and, ascending thin limb of Henle's loop (hamster), F593  
 Protein  
   apical membrane, polyclonal antibodies and, urinary bladder (frog), F437  
   assay, photon-counting microcolorimeter, F203  
   calcium-binding, dietary calcium and, F474  
   extracellular matrix, thromboxane stimulation of, F488  
   GTP-binding, localization in collecting duct cells, F1063  
   insulin-like growth factor-binding, kidney, F22  
   peritubular capillary, proximal tubules, F1046  
   renal response to, Fanconi syndrome, F14  
   Tamm-Horsfall, nephrocalcin and urine effects on crystal nucleation, F824  
 Protein kinase C  
   activation of, high glucose effects, mesangial cells, F571  
   activity, cAMP effects, LLC-PK<sub>1</sub> cells, F945  
   complement C5b-9 complex effects, glomerular epithelial cells, F427  
   modulation of cAMP, proximal tubular cells, F587  
   renal, characterization of, F679  
   sodium-calcium exchange and, glomerular mesangium, F466  
 Proteinuria  
   glomerular, hypertension and, F459  
   PAF, glomerular size-selective properties and, F85  
 Proton, secretory rate, during chronic metabolic alkalosis, distal tubules, F753  
 Pump, sodium, intracellular ATP and, proximal convoluted tubules, F634  
 Pyrazinoate, PAH and urate transport with, basolateral (pig), F265

## Q

- Quinidine, calcium-activated potassium channel, renal brush-border membrane vesicles, F187

## R

- ral*, localization, collecting duct cells, F1063



- ras* superfamily, localization, collecting duct cells, F1063
- Rauwolsicaine, prazosin-sensitive adrenoceptors and, ICMD cells, F760
- Receptors
- adrenoceptors
    - prazosin-sensitive, ICMD cells, F760
    - $\beta$ -, proximal straight tubules, F393
  - ANF, mRNA, localization in kidney, F1080
  - angiotensin II, renal cortex (rat, monkey), F512
  - calcitonin, multinucleated alveolar macrophage expression of, F1026
  - dopamine
    - PGE<sub>2</sub> production and, ICMD cells, F647, F655
    - renal cortical collecting duct, F890
  - vasopressin, endocytosis mediated by, F1
- Rectal gland, C-type ANP (shark), F734
- Renal nerves
- activity, norepinephrine spillover and, F44
  - denervation, dopamine-receptor antagonists and, F70
  - sympathetic, glomerular ANP receptors and filtration, F29
- Renin
- chloride depletion alkalosis, angiotensin II role in, F741
  - inactive, isoelectric peaks, renal effects, F975
  - inhibition, awake state (marmoset), F179
  - plasma activity, sodium balance and, F300
  - release, kidney cortex (rat, monkey), F512
- Resistance
- electrical, across monolayers, LLC-PK<sub>1</sub> cells, F1038
  - renal vascular, thromboxane and angiotensin effects, F238
  - transmural, ascending thin limb of Henle's loop (hamster), F593
- Ribonucleic acid messenger
- erythropoietin, inhibitors of oxidative phosphorylation and, renal, F982
  - extracellular matrix, high glucose effects, mesangial cells, F571
- Rolipram, intramembranous particles and, nephrogenic diabetes insipidus, F640
- Ruthenium red, tight junction integrity, ATP depletion and, LLC-PK<sub>1</sub> cells, F1038

## S

- Salt
- excretion, renal, central ANF effects of, F354
  - transport, thyroid hormone effects, renal brush-border membrane, F420
- Saralasin
- angiotensin II, chloride depletion alkalosis, F741
  - cytochrome oxidation, changes in outer medulla, F849
- Sclerosis, glomerular, hypertension and, F459
- Secretory currents, acid-base, localization of, epithelial cells (turtle), F963
- Serine, transport, specificity of, renal papilla, F495
- Shock, hypovolemic, blood pressure and renal function during, nitric oxide effects, F868
- Sodium
- balance, normal control of, F300
  - dependency, urate and PAH transport, basolateral membrane vesicles (pig), F265
  - excretion, dopamine blocker and renal denervation effects, F70
  - intracellular, vasopressin-induced increase, vascular smooth muscle cells, F1007
  - transport
    - clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126
    - 11-dehydrocorticosterone effects, bladder (toad), F873
    - intracellular ATP relations, proximal convoluted tubule, F634
    - renal, ANP and, F921
- Sodium-calcium exchange
- calcium depletion and, proximal tubules, F328
  - regulation of, mesangial cells, F466
  - renal, expression in oocytes, F207
- Sodium channels
- amiloride-sensitive, cortical collecting tubule, F933
  - apical maxi, intercalated cells of cortical collecting tubule, F696
- Sodium chloride
- absorption
    - colonic, thiazide effects, F452
    - glucocorticoid effects, distal colon, F545
  - transport
    - ascending vasa recta, F519
    - thiazide infusion effects, distal convoluted tubules, F137
- Sodium-citrate cotransporter, chronic potassium depletion effects, renal brush-border membrane, F767
- Sodium-hydrogen exchange
- calcium influx activation of, cytosolic acidification effects, LLC-PK<sub>1</sub> cells, F617
  - developmental maturation of, renal tubular brush-border membrane, F1017
  - low-dose glucocorticoid effects, distal colon, F545
  - regulation by ATP and calmodulin antagonists, renal epithelial cells, F607
- Sodium-hydrogen exchanger
- cDNA cloning and immunolocalization, LLC-PK<sub>1</sub> renal epithelial cells, F1088
  - hormonal responses of, proximal, in spontaneous hypertension, F526
- Sodium-hydrogen ion exchange, thiazide effects, colon, F452
- Sodium ion-hydrogen ion exchange, vasopressin and, vascular smooth muscle cells, F1007
- Sodium-potassium-ATPase, IL-1 inhibition of, inner medullary collecting duct cells, F1013
- Sorbitol, content, salt loading and, inner medulla, F957
- S-sulpride, hyperfiltration and, amino acid-induced, F70
- Sympathetic nerves
- activity, renal salt excretion and, F354
  - control, sodium balance, F300
- Sympathetic nervous system, activity, norepinephrine spillover and, awake state, F44

## T

- Taurine
- content, osmotically regulated, renal inner medulla, F957
  - transport, specificity of, renal papilla, F495
- Tetraethylammonium
- basolateral transport, kidney tubules, F386
  - transport, renal brush-border membrane vesicles, F443
- Thiazide
- chronic infusion, distal convoluted tubules, F137
  - <sup>22</sup>Na<sup>+</sup> chloride absorption and, colon, F452
- Thrombin, adhesion and shape effects, mesangial cells, F336
- Thromboxane
- angiotensin and, genetic hypertension, F238
  - production, experimental glomerulonephritis, F213
  - stimulation, extracellular matrix proteins, F488
- Thromboxane A<sub>2</sub>, IgG complex and LDL uptake, mesangial cells, F536
- Thyroid hormones, sodium-sulfate cotransport and, renal brush-border membrane, F420
- TNF- $\alpha$  see Tumor necrosis factor- $\alpha$
- Trichlormethiazide, interaction with PTH, calcium absorption in connecting tubules, F36
- Tubulozole, isotonic cell volume control, proximal tubules, F60
- Tumor necrosis factor, phagocyte adhesion induced by, mesangial cells, F1071
- Tumor necrosis factor- $\alpha$ , nerve growth factor synthesis and, mesangial cells, F792

## U

- Urate, transport, sodium dependence of, basolateral membrane vesicles (pig), F265
- Urea, permeability, regulation, collecting duct, F554
- Ureter
- bilateral obstruction, eicosanoid production and, F248
  - unilateral obstruction, cellular distribution of hydrogen-ATPase after, F365
- Urinary bladder
- acid-base secretory currents, localization, epithelial cells (turtle), F963
  - ADH-induced water channels, synthetic estrogen effects (frog), F144
  - aldosterone secretion, 11-dehydrocorticosterone effects (toad), F873
  - water channels, ADH-induced, polyclonal antibodies in (frog), F437
- Urinary concentrating mechanism
- sodium and water transport, ascending vasa recta, F519
  - water permeability, collecting duct, F554
- Urinary excretion, citrate, chronic potassium depletion effects, F767
- Urine, nephrocalcin and, nucleation of calcium oxalate monohydrate crystals, F824

## F1122

Urodilatin, renal, evolving concepts, F921  
Urokinase, adhesion loss and, mesangial cells, F336

## V

Vasa recta  
ANF receptor mRNA, localization, F1080  
ascending, sodium and water transport, F519  
microinfusion, amino acids, F495  
photon-counting microcolorimeter, F203  
Vasoconstriction, atriopeptin II effects, afferent and efferent arterioles, F1102  
Vasoconstrictors, selective inhibition of responses, PAF and, kidney, F108  
Vasodilation, atriopeptin II effects, afferent and efferent arterioles, F1102  
Vasopressin: *see also* Antidiuretic hormone arginine  
clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126  
ion channel activities, mesangial cells, F808

## SUBJECT INDEX TO VOLUME 30

lithium-induced nephrogenic diabetes, F505  
osmotic water permeability stimulated by, endothelin-1 effects, IMCD, F951  
cell calcium and, collecting tubule cells, F720  
dopamine receptors, renal cortical collecting duct, F890  
intracellular sodium increase, vascular smooth muscle cells, F1007  
intramembranous particles and, nephrogenic diabetes insipidus, F640  
PAF and, renal vascular reactivity, F108  
pathogenesis of nephrogenic diabetes insipidus and, F345  
prazosin-sensitive adrenoceptors and, ICMD cells, F760  
protein kinase C activity and, renal LLC-PK<sub>1</sub> cells, F945  
receptor: *see* Receptors  
vasoconstrictor effects, afferent arterioles, F273  
Vincristine, isotonic cell volume control, proximal tubules, F60

Vitamin D<sub>3</sub>, 1,25-dihydroxy-, calcium transport and, cortical collecting duct, F799

## Volume

cell: *see* Cell volume  
expansion, renal, effects in spontaneous hypertension, F567

## W

## Water

ADH-induced channels, synthetic estrogen effects (frog), F144  
deprivation, renal sympathetic nerve modulation, F29  
osmotic permeability, AVP stimulation of, endothelin-1 effects, IMCD, F951  
transport  
ascending vasa recta, F519  
clonidine and PGE<sub>2</sub> effects, cortical collecting duct, F126  
coupled, proximal tubule, F1046  
Water channels, ADH-induced, polyclonal antibodies in, urinary bladder (frog), F437



# Author Index to Volume 30

- Abe, K., F393  
Allon, M., F227  
Alpern, R. J., F767  
Amiel, C., F587  
Anderson, C. B., F841  
Anderson, R. J., F945  
Arendshorst, W. J., F238  
Aronson, P. S., F187, F1088  
Asano, Y., F505  
Asplin, J., F824  
Atkins, J. L., F849  
Awazu, M., F29  
Ayo, S. H., F571  
Badr, K. F., F578  
Ballard, F. J., F626  
Ballermann, B. J., F117  
Barac-Nieto, M., F153  
Barnes, J. L., F873  
Barrett, P. Q., F706  
Bastani, B., F365, F1063  
Bastl, C. P., F545  
Battaglia, C., F85  
Battilana, C., F726  
Baum, M., F746  
Bauman, C. A., F60  
Beck, J. S., F634  
Béliveau, R., F663  
Bhati, V., F328  
Biemesderfer, D., F1088  
Bindels, R. J. M., F799  
Blandina, P., F655  
Bloch, R., F670  
Boeckh, C., F792  
Bollag, W. B., F706  
Bourguet, J., F144  
Bourke, E., F227  
Brady, H. R., F1013, F1071  
Breckon, R., F945  
Brem, A. S., F873  
Brenner, B. M., F117, F1071  
Bressler, L., F545  
Breton, S., F634  
Breyer, M. D., F377, F617  
Brezis, M., F787  
Briggs, J. P., F273  
Brokl, O. H., F386  
Brown, D., F831  
Brown, G. P., F51  
Bruggeman, L. A., F488  
Buckalew, V. M., Jr., F108  
Budreau, A., F1017  
Bunting, P. B., F512  
Burns, K. D., F607, F617  
Bushinsky, D. A., F76  
Calamita, G., F144, F437  
Canfield, P. E., F1038  
Cannon, F. B., F688  
Capdevila, J., F578  
Cartwright, M. E., F512  
Chabala, J. M., F76  
Chan, A. J., F452  
Chang, H., F808  
Chardin, P., F1063  
Charney, A. N., F452  
Chatsudthipong, V., F386, F858  
Chatziantoniou, C., F238  
Chen, L., F126  
Chesney, R. W., F1017  
Chou, C.-L., F554  
Cinotti, G. A., F466  
Clemmons, D. R., F22  
Coe, F. L., F824  
Coffey, A., F345  
Coffey, A. K., F640  
Collins, T., F117  
Conger, J. D., F1102  
Connors, B., F91  
Cragoe, E. J., Jr., F545  
Cybulsky, A. V., F427  
Dadan, J., F85  
Dantzler, W. H., F386, F495, F858  
Deen, W. M., F409  
DeGanella, S., F824  
Delaney, V., F227  
Demmert, G., F354  
Denton, M. D., F1071  
De Nucci, G., F360  
Desir, G. V., F187  
DeYoung, D. R., F815  
Dinour, D., F787  
Dolson, G. M., F308, F753  
Dominguez, J. H., F318, F328  
Dong, L., F679  
Dorfman, D. M., F117  
Dorward, P. K., F44  
Dousa, T. P., F345, F640  
Dowd, T. L., F153  
Downey, G. P., F60  
Drüeke, T., F474  
Drumond, M. C., F409  
Duchambon, P., F474  
Durham, J. H., F963  
Eaton, D. C., F933, F1055  
Ellison, D. H., F137  
English, D., F318  
Evan, A. P., F91  
Evans-Hexdall, L., F163  
Falck, J. R., F578  
Falk, S. A., F1102  
Falzone, R., F256  
Felder, R. A., F890  
Fenton, J. W., II, F336  
Fine, L. G., F283, F292  
Fisher, K., F670  
Flouret, G., F670  
Forrest, J. N., Jr., F734  
Frank, J. D., F512  
Friedlander, G., F587  
Frindt, G., F207, F696  
Frölich, J. C., F779  
Fujihara, C. K., F256  
Furuya, H., F377  
Galla, J. H., F741  
Gapstur, S. M., F345  
Garcia, J. G. N., F318  
Garcia-Perez, A., F1080  
Garoni, J. A., F336, F571  
Garrett, M., F688  
Gattone II, V. H., F91  
Geerdes, A. M., F1038  
Gesek, F. A., F526  
Giacomini, K. M., F443  
Gibson, R. E., F512  
Giebisch, G., F634, F1046  
Giebisch, G. H., F187  
Glass, W. F., II, F336  
Gluck, S., F365  
Goetz, K. L., F921  
Goldfarb, D. S., F452  
Gotlieb, A. I., F60  
Grabau, G. G., F841  
Graudenz, M. S., F256  
Green, R., F1046  
Greenberg, S. G., F300  
Grenader, A., F655  
Guntupalli, J., F227  
Gupta, A., F1063  
Gupta, R. K., F153  
Gupta, S., F537  
Haake, G., F779  
Hamilton, K. L., F1055  
Hamm, L. L., F896  
Hanano, M., F988  
Handa, R. K., F108  
Handler, J. S., F197  
Haramati, A., F1110  
Harris, K. P. G., F365  
Harris, P. J., F998  
Harris, R. C., F29, F607, F617  
Hartog, A., F799  
Harvey, N., F420  
Healy, D. P., F647, F655  
Hebert, G. Z., F60  
Hemken, P., F365  
Hernandez, D., F452  
Herndon, J., F896  
Hildebrandt, F., F1088  
Hinton, C. F., F933  
Hofbauer, K., F179  
Holstein-Rathlou, N.-H., F400, F880  
Homma, S., F345, F505, F640  
Homma, T., F607, F617  
Hori, R., F774  
Horigan, E. A., F488  
Horikoshi, S., F488, F688  
Hruska, K. A., F1063  
Hui, A. C., F443  
Humke, U., F179  
Huo, T., F647, F655  
Ichikawa, I., F29  
Iga, T., F988  
Igarashi, P., F1088  
Igarashi, Y., F393  
Imada, T., F29  
Imai, M., F36, F593  
Inagami, T., F29  
Inui, K.-I., F774  
Isales, C. M., F706  
Ishikawa, S., F1007  
Jacobson, H. R., F377, F578  
Jaken, S., F679  
Jeffries, W. B., F760  
Jones, D. R., F975  
Jones, D. S. C., F734  
Kamanna, V. S., F163  
Karara, A., F578  
Karlson, F. M., F169  
Kastner, S., F779  
Katoh, T., F578  
Katsura, T., F774  
Khraibi, A. A., F567  
Kim, D. C., F988  
Kirschenbaum, M. A., F163  
Klahr, S., F248, F365  
Klanke, B., F779  
Kleinman, H. K., F688  
Kleinman, K. S., F292  
Klotman, P. E., F488, F688  
Knecht, A., F283, F292  
Knepper, M. A., F554, F1080  
Knowles, S. E., F626  
Kobayashi, S., F22  
Kohan, D. E., F221, F1013  
Kon, V., F29  
Kondo, Y., F393  
Koo, E. W. Y., F60  
Kopp, J. B., F688  
Koyama, S., F593  
Kreissberg, J. I., F336, F571  
Kudo, K., F393  
Kumar, R., F1  
Kurokawa, K., F720, F808  
Kusano, E., F505  
Kwon, H. M., F197  
Lacour, B., F474  
Lahera, V., F1033  
Lanese, D. M., F1102  
Lankford, S. P., F554, F849  
Laprade, R., F634  
Layton, H. E., F904  
Lee, J., F420  
Lefkowitz, J. B., F213  
Le Goas, F., F587  
Le Guevel, Y., F144  
Levens, N., F179  
Levi, M., F767  
Levi-Setti, R., F76  
Leyssac, P. P., F169  
Lieberthal, W., F868  
Limongi, D. M. Z. P., F256  
Ling, B. N., F933  
Linshaw, M. A., F60  
Lohstroh, P., F1017  
López, G., F70  
López, R., F70  
Lorenz, J. N., F273  
Luke, R. G., F741  
Lumpkin, M. D., F1110  
Luscinskas, F. W., F1071  
Lutz, W., F1  
Lyle, D., F227  
Macalister, T. J., F60  
Maegawa, H., F774  
Mairbaur, H., F634  
Mangino, M. J., F841  
Mann, C., F318, F328  
Marletta, M. A., F600  
Marsden, P. A., F117, F1071  
Marsh, D. J., F400  
Martí, M. S., F70  
Martin, A. A., F626  
Martin, B. M., F1080  
Martínez-Maldonado, M., F70  
Marumo, F., F951  
Matheson, K. L., F873  
Matsunaga, H., F808  
McCarron, D. A., F474  
McCarthy, R. T., F706  
McDonald, L. A., F767

- McGarry, A. E., F868  
 McGrath, B. P., F44  
 McKenzie, I. M., F975  
 McKenzie, J. K., F975  
 Megyesi, J., F1095  
 Mendelsohn, F. A. O., F998  
 Mendez, M., F545  
 Méndez, R. E., F70  
 Mené, P., F466  
 Meyer, T. W., F459  
 Miller, P. L., F459  
 Milovanovic, S., F207  
 Miranda-Guardiola, F., F1033  
 Miyajima, Y., F808  
 Molitoris, B. A., F1038  
 Moncada, S., F1033  
 Moore, L. C., F904  
 Moriyama, T., F1080  
 Morris, D. J., F873  
 Morrissey, J., F248  
 Morsing, P., F137  
 Müller, G. A., F283, F292  
 Mulroney, S. E., F1110  
 Murayama, N., F505  
 Murphy, M. K., F841  
 Myers, B. D., F726  
 Nagamatsu, T., F213  
 Nakagawa, Y. N., F824  
 Nakamura, M., F36  
 Nakanishi, T., F957  
 Naruse, M., F720  
 Nissim, I., F481  
 Nobes, M. S., F998  
 Nonoguchi, H., F951  
 Norman, J. T., F283, F292  
 Noshiro, T., F44  
 Ogata, E., F720, F808  
 Ohbu, K., F890  
 Oishi, R., F951  
 Okada, K., F1007  
 Okuda, T., F808  
 Olshen, R. A., F726  
 Orkin, S. H., F117  
 Osborn, J. L., F300  
 O'Sullivan, D. J., F640  
 Ott, R. J., F443  
 Otten, U., F792  
 Owens, P. C., F626  
 Pácha, J., F696  
 Pallone, T. L., F203, F519  
 Palmer, L. G., F696  
 Perico, N., F85  
 Peterson, D. R., F670  
 Pettinger, W. A., F760  
 Pfeilschifter, J., F792  
 Pippin, J., F213  
 Pitman, E. B., F904  
 Poon, M., F1095  
 Pouyssegur, J., F1088  
 Preisig, P. A., F767  
 Preston, A. S., F197  
 Price, P. M., F1095  
 Pugliese, F., F466  
 Purcell, H., F365  
 Qian, H.-Y., F1026  
 Quigley, R., F746  
 Radeke, H., F792  
 Radermacher, J., F779  
 Radnik, R., F571  
 Raji, L., F600  
 Rampt, E., F336  
 Ratcliffe, P. J., F982  
 Ray, P. E., F488  
 Raymond, M. J., F1026  
 Read, L. C., F626  
 Reif, M. C., F126  
 Reilly, R. F., F1088  
 Remuzzi, A., F85  
 Remuzzi, G., F85  
 Rennke, H. G., F459  
 Roch-Ramel, F., F265  
 Rodemann, H. P., F283, F292  
 Rohmeiss, P., F354  
 Rollins, B. J., F1095  
 Rome, L., F741  
 Romero, J. C., F1033  
 Rosenzweig, S. A., F1026  
 Rothrock, J. K., F318, F328  
 Roulet, C. M., F474  
 Roulet, J.-B., F474  
 Sabolic, I., F831  
 Sackin, H., F696  
 Safirstein, R., F1095  
 Saggi, S. J., F1095  
 Sahai, A., F481  
 Saied, S. I., F163  
 Saigusa, T., F44  
 Saito, T., F1007  
 Salisbury, J. L., F1  
 Salom, M. G., F1033  
 Sardet, C., F1088  
 Satlin, L. M., F91  
 Sawada, Y., F988  
 Schafer, J. A., F126  
 Scheffey, C., F963  
 Schlondorff, D., F537  
 Schnermann, J., F273  
 Schofield, J. P., F734  
 Schoolwerth, A. C., F526  
 Schorn, T. W., F512  
 Schreiner, G. F., F213  
 Schulman, G., F545  
 Schurek, H.-J., F779  
 Schwartz, G. J., F91  
 Sheils, J., F868  
 Shen, Z., F537  
 Shimizu, T., F36  
 Shipley, A. M., F963  
 Shultz, P. J., F600  
 Siegl, P. K. S., F512  
 Silbernagl, S., F495  
 Singhal, P. C., F537  
 Skopicki, H. A., F670  
 Skøtt, O., F169  
 Slayman, C. W., F1088  
 Smith, B. E., F815  
 Smyth, D. D., F975  
 Spitzer, A., F153  
 Steiner, P., F792  
 Stejskal, E., F1017  
 Stevens, J. L., F679  
 Stolte, H. F., F779  
 Stow, J. L., F831  
 Strandhoy, J. W., F108  
 Strévey, J., F663  
 Sugita, M., F957  
 Sugiyama, Y., F988  
 Sun, L., F760  
 Svelto, M., F437  
 Tada, K., F393  
 Takahashi, K., F578  
 Takano, M., F774  
 Takeda, S., F505  
 Tan, C. C., F982  
 Tannen, R. L., F481  
 Tate, S. S., F207  
 Taubman, M. B., F1095  
 Tayeh, M. A., F600  
 Tenenhouse, H. S., F420  
 Terada, Y., F554, F1080  
 Tershner, S., F300  
 Tetsuka, T., F505  
 Thomasset, M., F474  
 Thorpe, H. H., F512  
 Timmermans, J., F799  
 Tomas, F. M., F626  
 Tomita, K., F951  
 Tomita, Y., F774  
 Troyer, D. A., F571  
 Uchida, S., F197, F720  
 Umemura, S., F760  
 Unger, T., F354  
 Unwin, R., F1046  
 Uyama, O., F957  
 Valenti, G., F437  
 Valeri, C. R., F868  
 Valtin, H., F345, F640  
 Van Os, C. H., F799  
 Vehaskari, V. M., F896  
 Velázquez, H., F137  
 Venkatachalam, M. A., F22  
 Venuto, R. C., F51  
 Vignery, A., F1026  
 Wade, J. B., F554  
 Wall, S. M., F554  
 Walters, E. A., F741  
 Wang, F., F1026  
 Way, D., F44  
 Weeks, B. S., F688  
 Weihprecht, H., F273  
 Weinman, E. J., F227  
 Weinstein, A. M., F1046  
 Welling, L. W., F60  
 Werner, D., F265  
 Wesson, D. E., F308, F753  
 Wexler, L., F726  
 Windhager, E. E., F207  
 Woo, D. D. L., F292  
 Wood, J., F179  
 Woods, L. L., F14, F815  
 Wright, F. S., F137  
 Wright, S. H., F386  
 Yamada, H., F998  
 Yamaki, M., F505  
 Yamashita, N., F808  
 Yamauchi, A., F197  
 Yanagisawa, H., F248  
 Yasuda, G., F760  
 Yip, K.-P., F400  
 Yoshinaga, K., F393  
 Yoshitomi, K., F36, F593  
 Young, E. W., F14  
 Yuan, B. H., F1102  
 Yuan, G., F443  
 Zatz, R., F256, F360  
 Zeidel, M. L., F1013  
 Zelikovic, I., F1017  
 Zhang, H., F726  
 Zikos, D., F670  
 Zweifach, A., F187

